



## HOT TERMIPol<sup>®</sup> DNA Polymerase

Cat. No.	Pack Size	Conc.
01-06-0000S	500 U SAMPLE	5 U/μl
01-06-00500	500 U	5 U/μl
01-06-02000	2000 U	5 U/μl

For *in vitro* use only

### Description:

HOT TERMIPol<sup>®</sup> DNA polymerase is a chemically modified TERMIPol<sup>®</sup> DNA polymerase. At ambient temperatures it is inactive, having no polymerase activity. HOT TERMIPol<sup>®</sup> DNA polymerase is fully activated by a 8-12 minute incubation at 95°C. This prevents extension of non-specifically annealed primers. The enzyme contains 5'→3' polymerase activity and enhanced efficiency for incorporating unconventional nucleotides (ddNTPs and labeled ddNTPs).

### Source:

Purified from an *E.coli* strain that carries an overproducing plasmid containing a modified gene of *Thermus aquaticus* DNA Polymerase.

### Application:

- MALDI-TOF mass spectrometry
- Primer extension
- Mass-array

### Reagents Provided:

- **HOT TERMIPol<sup>®</sup> DNA Polymerase**
- **10x Reaction Buffer C**  
500 mM Tris-HCl pH 9.5 at 25°C
- **100 mM MgCl<sub>2</sub>**

### Concentration:

5 U/μl

### Unit definition:

One unit is defined as the amount of enzyme required to catalyze the incorporation of 10 nmol of dNTP into an acid-insoluble form in 30 minutes at 74°C.

### Storage and Dilution buffer:

50% glycerol (v/v), 20 mM Tris-HCl pH 8.7 at 25°C, 100 mM KCl, 0.1 mM EDTA and stabilizers.

### Quality control:

The enzyme is free of nicking and priming activities, exonucleases and non-specific endonucleases. Activity and stability tested via thermo cycling. The error rate per nucleotide per cycle is ~ 8 x 10<sup>-5</sup>. Estimated half life at 95°C is 1.5 hours.

### Shipping and Storage conditions:

Routine storage: -20°C

Shipping and temporary storage for up to 1 month at room temperature has no detrimental effects on the quality of HOT TERMIPol<sup>®</sup> DNA polymerase.

### Safety warnings and precautions:

This product and its components should be handled only by persons trained in laboratory techniques. It is advisable to wear suitable protective clothing, such as laboratory overalls, gloves and safety glasses. Care should be taken to avoid contact with skin or eyes. In case of contact with skin or eyes, wash immediately with water.

*Some applications this product is used in may require a license which is not provided by the purchase of this product. Users should obtain the license if required.*

### Related products:

Product name	Pack size	Cat. No.
TERMIPol <sup>®</sup>	500 U	01-03-00500
TERMIPol <sup>®</sup>	2000 U	01-03-02000
TERMIPol <sup>®</sup> HC	1000 U	01-07-01000
TERMIPol <sup>®</sup> HC	5000 U	01-07-05000